

(cont) 2825

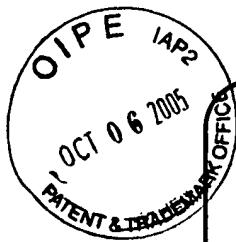
Please type a plus sign (+) inside this box →

+

Based on PTO/SB/21 (05-03)

Approved for use through 04/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond
to a collection of information unless it displays a valid OMB control number.



TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

		Application Number	09/737,245
		Filing Date	12/13/2000
		First Named Inventor	Steven Teig, et al.
		Group Art Unit	2825
		Examiner Name	Do, Thuan V.
Total Number of Pages in This Submission		Attorney Docket Number	SPLX.P0012

Enclosures (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers (for an application)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declarations(s)	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosures (Listed below): Postcard Transmittal Letter Form 1449 46 cited references eIDS payment receipt
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	
<input checked="" type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Documents	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Response to Missing Parts/ Incomplete Application		
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

Remarks:

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Or Individual name	Ali Makoui, Reg. No. 45,536 of Stattler Johansen & Adeli LLP
Signature	
Date	October 03, 2005

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Services as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this date: 10/03/05

Typed or printed name	Ali Makoui
Signature	
	Date
	October 03, 2005

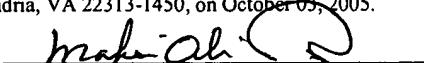
This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: **Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**



PATENT
Docket No. SPLX.P0012

CERTIFICATE OF MAILING BY "FIRST CLASS MAIL"

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:
Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on October 03, 2005.


Ali Makou

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Steven Teig

Serial No.: 09/737,245

Filing Date: 12/13/2000

For: METHOD AND APPARATUS FOR
USING CONNECTION GRAPHS WITH
POTENTIAL DIAGONAL EDGES TO MODEL
INTERCONNECT TOPOLOGIES DURING
PLACEMENT

Examiner: Do, Thuan V

Group Art Unit: 2825

**INFORMATION DISCLOSURE
STATEMENT UNDER 37 C.F.R. § 1.97**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. § 1.97 and § 1.98, applicants submit with this Information Disclosure Statement the attached Form PTO-1449, and copies of the documents listed in the 1449 form for consideration by the Examiner. The Examiner is requested to make these documents of record. Applicants would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

This Information Disclosure Statement is submitted after receipt of a First Office Action on the merits but before receipt of a Final Office Action or Notice of Allowance. Therefore, a fee of \$180 is required for the submission of this Information Disclosure Statement. However, Applicant concurrently filed an Electronic Information Disclosure Statement on 10/03/2005 and has paid for the \$180 fee (a copy is herein attached). Thus, Applicant has not enclosed the \$180 fee because Applicant respectfully believes that no additional fees are required.

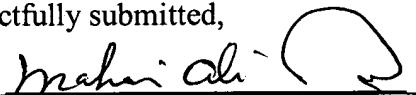
This Information Disclosure Statement under 37 C.F.R. § 1.97 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

If the Patent Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 50-1128 referencing SPLX.P0012. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: October 03, 2005

Respectfully submitted,

By:


Ali Makoui
Registration No. 45,536

Stattler, Johansen & Adeli LLP
1875 Century Park East, Suite 1050
Los Angeles, CA 90067
Phone No. (310) 785-0140 x302
Fax No. (310) 785-9558

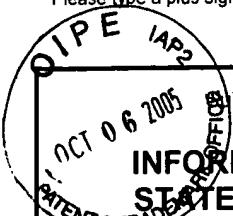
Please type a plus sign (+) inside this box →

Based on PTO/SB/08 a & b (05-03)

Approved for use through 05/31/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number



Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet				1	of	5	Application Number	09/737,245
							Filing Date	12/13/00
							First Named Inventor	Steven Teig
							Group Art Unit	2825
							Examiner Name	Thuan V. Do
							Attorney Docket Number	SPLX.P0012

FOREIGN PATENT DOCUMENTS

Examiner* Initials	Cite No. ¹	Foreign Patent Document		Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴				
1.	JP	411296560	A	10-29-1999	Matsumoto et al.	with English translation of Abstract;	
2.	JP	2000-82743	A	03-21-2000	Igarashi et al.	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
3.	JP	H03-173471	A	07-26-1991	Tawada et al.	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
4.	JP	H05-243379	A	09-21-1993	Masako Kubota	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
5.	JP	H05-102305	A	04-23-1993	Akihiro Sato	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
6.	JP	H07-086407	A	03-31-1995	Shinpei Miura	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓

Examiner Signature	Date Considered	
-----------------------	--------------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number(optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Please type a plus sign (+) inside this box →

Based on PTO/SB/08 a & b (05-03)

Approved for use through 05/31/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	09/737,245
				Filing Date	12/13/00
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Thuan V. Do
Sheet	2	of	5	Attorney Docket Number	SPLX.P0012

FOREIGN PATENT DOCUMENTS							
							application.
	7.	JP	H09-162279	A	06-20-1997	Masaaki Yoshida	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.
	8.	JP	02-262354		10-25-1990	Kuribayashi, Mototaka	

Examiner Signature	Date Considered
--------------------	-----------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number(optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Please type a plus sign (+) inside this box →

Substitute for form 1449A/PTO				Application Number	09/737,245
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	12/13/00
(use as many sheets as necessary)				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Thuan V. Do
Sheet	3	of	5	Attorney Docket Number	SPLX.P0012

NON PATENT LITERATURE DOCUMENTS

Examiner* Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	9.	Ahuja, R. et al., Faster Algorithms for the Shortest Path Problem, Journal of the Association for Computing Machinery, vol. 37, No. 2, April 1990, pp. 213-223.	
	10.	Brady, L. et al., Channel Routing on a 60° Grid, extended abstract, pp. 956-931.	
	11.	Brambilla, A. et al., Statistical Method for the Analysis of Interconnects Delay in Submicrometer Layouts, IEEE, 8/2001, pp. 957-966.	
	12.	Carothers, K., A Method of Measuring Nets Routability for MCM's General Area Routing Problems, 1999, pp. 186-192.	
	13.	Chen, H. et al., Physical Planning of On-Chip Interconnect Architectures, 2002, IEEE, International Conference, pp. 30-35.	
	14.	Cheng, K. et al., Manhattan or Non Manhattan? A Study of Alternative VLSI Routing Architectures, pp 47-52, 2000.	
	15.	Cheng, K., Steiner Problem in Octilinear Routing Model, a Thesis Submitted for the Degree of Master of Science, National University Singapore, 1995, pp. 1-122.	
	16.	Chip Model with Wiring Cost Map, August 1983, IBM Technical Disclosure Bulletin, vol. 26, iss. 3A, pp. 929-933.	
	17.	Cong, J. et al., Efficient Heuristics for the Minimum Shortest Path Steiner Arborescence Problem with Applications to VLSI Physical Design, Cadence Design Systems and UCLA Computer Science Department, pp.88-95.	
	18.	Cong, J. et al., Performance-Driven Multi-Layer General Area Routing for PCB/MCM Designs, UCLA Computer Science Department, 1998, pp. 356-361.	
	19.	Enbody, R. et al., Near-Optimal n -Layer Channel Routing, 23 rd Design Automation Conference, 1986, pp. 708-714.	
	20.	Fang, S. et al., Constrained Via Minimization with Practical Considerations for Multi-Layer VLSI/PCB Routing Problems, 28 th ACM/IEEE Design Automation Conference, 1991, pp. 60-65.	
	21.	Hom, I. et al., Estimation of the Number of Routing Layers and Total Wirelength in a PCB Through Wiring Distribution Analysis, 1996, pp. 1-6.	

Examiner Signature	Date Considered
--------------------	-----------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number(optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Please type a plus sign (+) inside this box → 

Substitute for form 1449A/PTO				Application Number	09/737,245
				Filing Date	12/13/00
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Thuan V. Do
Sheet	4	of	5	Attorney Docket Number	SPLX.P0012

NON PATENT LITERATURE DOCUMENTS	
22.	Hong, X. et al., Performance-Driven Steiner Tree Algorithms for Global Routing, 30 th ACM/IEEE Design Automation Conference, 1993, pp. 177-181.
23.	Jiang Hu et al.: "A Timing-Constrained algorithm for Simultaneous Global Routing of Multiple Nets" IEEE/ACM International Conference on Computer Aided Design. ICCAD – 2000. IEEE/ACM Digest of Technical Papers (CAT. NO.00CH37140), Proceedings of International Conference on Computer Aided Design (ICCAD), San Jose, CA USA, 5-9 Nov. 2000. Pages 99-103.
24.	Kastner R et al.: "Predictable Routing" IEEE/ACM International Conference on Computer Aided Design. ICCAD – 2000. IEEE/ACM Digest of Technical Papers (CAT. NO.00CH37140), Proceedings of International Conference on Computer Aided Design (ICCAD), San Jose, CA, USA, 5-9 Nov. 2000. Pages 110-113.
25.	Khoo, K. et al., An Efficient Multilayer MCM Router Based on Four-Via Routing, 30 th ACM/IEEE Design Automation Conference, 1993, pp. 590-595.
26.	Lillis, J. et al., Table-Lookup Methods for Improved Performance-Driven Routing, 1998, pp. 368-373.
27.	Lipski, W. et al., A Unified Approach to Layout Wirability, Mathematical Systems Theory, 1987, pp. 189-203.
28.	Lodi, E. et al., A Preliminary Study of a Diagonal Channel-Routing Model, Algorithmica, 1989, pp.585-597.
29.	Lodi, E. et al., Lecture Notes in Computer Science, A 4d Channel Router for a Two Layer Diagonal Model, pp. 464-476, July 1988.
30.	Naclerio, N. et al., Via Minimization for Gridless Layouts, 24 th ACM/IEEE Design Automation Conference, 1987, pp. 159-165.
31.	Nam, G. et al, Satisfiability-Based Layout Revisited: Detailed Routing of Complex FPGAs Via Search-Based Boolean SAT, 1999, pp. 167-175..
32.	Oh, J. et al., Constructing Lower and Upper Bounded Delay Routing Trees Using Linear Programming, 33 rd Design Automation Conference, 1996.
33.	Partitioning Logic on to Graph Structure, IBM Technical Disclosure Bulletin, February 1990, vol. 32, iss. 9A, pp. 469-475.
34.	Phillips, N., Channel Routing by Constraint Logic, Department of Computer Science Southern Illinois University, ACM, 1992.

Examiner Signature	Date Considered
--------------------	-----------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number(optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Please type a plus sign (+) inside this box →

Substitute for form 1449A/PTO				Application Number	09/737,245
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	12/13/00
(use as many sheets as necessary)				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Thuan V. Do
Sheet	5	of	5	Attorney Docket Number	SPLX.P0012

NON PATENT LITERATURE DOCUMENTS		
35.	Takashima, Y. et al, Routability of FPGAs with Extremal Switch-Block Structures, IEICE Trans. Fundamentals, vol. E81-A, No. 5, May 1998, pp. 850-856.	
36.	Thakur, S. et al., Algorithms for a Switch Module Routing Problem, 1994, pp. 265-270.	
37.	Theune, D. et al., HERO: Hierarchical EMC-constrained routing, 11/1992, IEEE pp 468-472.	
38.	Tseng, H., Timing and Crosstalk Driven Area Routing, pp. 378-381.	
39.	Wang, D., Novel Routing Schemes for IC Layout, Part I: Two-Layer Channel Routing, 28 th ACM/IEEE Automation Conference, 1991, pp. 49-53.	
40.	Wang, M. et al., Modeling and Minimization of Routing Congestion, Jan. 2000, IEEE proceedings of ASP-DAC, Asia and South Pacific, pp. 185-190.	
41.	Wood, G. et al., FPGA Routing and Routability Estimation Via Boolean Satisfiability, Department of Electrical and Computer Engineering Carnegie Mellon University, Pittsburgh, PA, pp. 119-125.	
42.	Zhang, C.X. et al., Floorplan Design Using a Hierarchical Neural Learning Algorithm, IEEE, 6/1991. pp. 2060-2063.	
43.	Zhou, H. et al., An Optimal Algorithm for River Routing with Crosstalk Constraints, 1996.	
44.	Zhou, H. et al., Global Routing with Crosstalk Constraints, Department of Computer Sciences, University of Texas, 1998, pp. 374-377.	
45.	Zhou, H. et al., Optimal River Routing with Crosstalk Constraints, ACM Transactions on Design Automation of Electronic Systems, vol. 3, No. 3, July 1998, pp. 496-514.	
46.	Cong J. et al., DUNE – A multilayer Gridless Routing System, May 2001, IEEE Transactions on Computer Aided Design of Integrated Circuits and Systems, vol 20, iss. 5, pp.633-647	

Examiner Signature	Date Considered
--------------------	-----------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number(optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**UNITED STATES PATENT AND TRADEMARK OFFICE
ACKNOWLEDGEMENT RECEIPT**

Electronic Version 1.1

Stylesheet Version v1.1.1

Title of Invention	Method and Apparatus for Using Connection Graphs with Potential Diagonal Edges to Model Interconnect Topologies During Placement																									
Submission Type:	Information Disclosure Statement																									
Application Number:	09/737245	*09/737245*																								
EFS ID:	93920																									
Server Response:	<table border="1"><thead><tr><th>Confirmation Code</th><th>Message</th></tr></thead><tbody><tr><td>ISVR1</td><td>Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application</td></tr><tr><td>ICON1</td><td>8353</td></tr><tr><td>USPTOEFSNotice</td><td>For assistance with e-filing a patent application, contact the Patent Electronic Business Center: Toll-Free Number:1(866) 217-9197 Website: http://www.uspto.gov/ebc/</td></tr></tbody></table>		Confirmation Code	Message	ISVR1	Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application	ICON1	8353	USPTOEFSNotice	For assistance with e-filing a patent application, contact the Patent Electronic Business Center: Toll-Free Number:1(866) 217-9197 Website: http://www.uspto.gov/ebc/																
Confirmation Code	Message																									
ISVR1	Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application																									
ICON1	8353																									
USPTOEFSNotice	For assistance with e-filing a patent application, contact the Patent Electronic Business Center: Toll-Free Number:1(866) 217-9197 Website: http://www.uspto.gov/ebc/																									
First Named Applicant:	Steven Teig, et al.																									
Attorney Docket Number:	SPLX.P0012																									
Timestamp:	2005-10-04 01:50:35 EDT																									
From:	us																									
File Listing:	<table border="1"><thead><tr><th>Doc. Name</th><th>File Name</th><th>Size (Bytes)</th></tr></thead><tbody><tr><td>us-ids</td><td>SPLX.P0012-B-usidst.xml</td><td>3276</td></tr><tr><td>us-ids</td><td>us-ids.dtd</td><td>7763</td></tr><tr><td>us-ids</td><td>us-ids.xsl</td><td>12026</td></tr><tr><td>package-data</td><td>SPLX.P0012-B-pkda.xml</td><td>1909</td></tr><tr><td>package-data</td><td>package-data.dtd</td><td>27025</td></tr><tr><td>package-data</td><td>us-package-data.xsl</td><td>19263</td></tr><tr><td colspan="2">Total files size</td><td>71262</td></tr></tbody></table>		Doc. Name	File Name	Size (Bytes)	us-ids	SPLX.P0012-B-usidst.xml	3276	us-ids	us-ids.dtd	7763	us-ids	us-ids.xsl	12026	package-data	SPLX.P0012-B-pkda.xml	1909	package-data	package-data.dtd	27025	package-data	us-package-data.xsl	19263	Total files size		71262
Doc. Name	File Name	Size (Bytes)																								
us-ids	SPLX.P0012-B-usidst.xml	3276																								
us-ids	us-ids.dtd	7763																								
us-ids	us-ids.xsl	12026																								
package-data	SPLX.P0012-B-pkda.xml	1909																								
package-data	package-data.dtd	27025																								
package-data	us-package-data.xsl	19263																								
Total files size		71262																								
Message Digest:	8839e85ef41cf400b36c7ad74803d62bad96ad50																									
Digital Certificate Holder Name:	cn=Mani Adeli,ou=Registered Attorneys,ou=Patent and Trademark Office,ou=Department of Commerce,o=U.S.																									

Government,c=US

**UNITED STATES PATENT AND TRADEMARK OFFICE
ACKNOWLEDGEMENT RECEIPT**

Electronic Version 1.1

Stylesheet Version v1.1.1

Title of Invention	Method and Apparatus for Using Connection Graphs with Potential Diagonal Edges to Model Interconnect Topologies During Placement																																		
Submission Type:	Information Disclosure Statement																																		
Application Number:	09/737245	*09/737245*																																	
EFS ID:	93919																																		
Server Response:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Confirmation Code</th> <th style="width: 70%;">Message</th> </tr> </thead> <tbody> <tr> <td>ISVR1</td> <td>Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application</td> </tr> <tr> <td>ICON1</td> <td>8353</td> </tr> <tr> <td>USPTOEFSNotice</td> <td>For assistance with e-filing a patent application, contact the Patent Electronic Business Center: Toll-Free Number:1(866) 217-9197 Website: http://www.uspto.gov/ebc/</td> </tr> </tbody> </table>		Confirmation Code	Message	ISVR1	Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application	ICON1	8353	USPTOEFSNotice	For assistance with e-filing a patent application, contact the Patent Electronic Business Center: Toll-Free Number:1(866) 217-9197 Website: http://www.uspto.gov/ebc/																									
Confirmation Code	Message																																		
ISVR1	Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application																																		
ICON1	8353																																		
USPTOEFSNotice	For assistance with e-filing a patent application, contact the Patent Electronic Business Center: Toll-Free Number:1(866) 217-9197 Website: http://www.uspto.gov/ebc/																																		
First Named Applicant:	Steven Teig, et al.																																		
Attorney Docket Number:	SPLX.P0012																																		
Timestamp:	2005-10-04 01:14:21 EDT																																		
From:	us																																		
File Listing:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Doc. Name</th> <th style="width: 40%;">File Name</th> <th style="width: 30%;">Size (Bytes)</th> </tr> </thead> <tbody> <tr><td>us-fee-sheet</td><td>SPLX.P0012-usfees.xml</td><td>1484</td></tr> <tr><td>us-fee-sheet</td><td>us-fee-sheet.xsl</td><td>25930</td></tr> <tr><td>us-fee-sheet</td><td>us-fee-sheet.dtd</td><td>11968</td></tr> <tr><td>us-ids</td><td>SPLX.P0012-usidst.xml</td><td>9493</td></tr> <tr><td>us-ids</td><td>us-ids.dtd</td><td>7763</td></tr> <tr><td>us-ids</td><td>us-ids.xsl</td><td>12026</td></tr> <tr><td>package-data</td><td>SPLX.P0012-pkda.xml</td><td>2357</td></tr> <tr><td>package-data</td><td>package-data.dtd</td><td>27025</td></tr> <tr><td>package-data</td><td>us-package-data.xsl</td><td>19263</td></tr> <tr> <td></td><td>Total files size</td><td>117309</td></tr> </tbody> </table>		Doc. Name	File Name	Size (Bytes)	us-fee-sheet	SPLX.P0012-usfees.xml	1484	us-fee-sheet	us-fee-sheet.xsl	25930	us-fee-sheet	us-fee-sheet.dtd	11968	us-ids	SPLX.P0012-usidst.xml	9493	us-ids	us-ids.dtd	7763	us-ids	us-ids.xsl	12026	package-data	SPLX.P0012-pkda.xml	2357	package-data	package-data.dtd	27025	package-data	us-package-data.xsl	19263		Total files size	117309
Doc. Name	File Name	Size (Bytes)																																	
us-fee-sheet	SPLX.P0012-usfees.xml	1484																																	
us-fee-sheet	us-fee-sheet.xsl	25930																																	
us-fee-sheet	us-fee-sheet.dtd	11968																																	
us-ids	SPLX.P0012-usidst.xml	9493																																	
us-ids	us-ids.dtd	7763																																	
us-ids	us-ids.xsl	12026																																	
package-data	SPLX.P0012-pkda.xml	2357																																	
package-data	package-data.dtd	27025																																	
package-data	us-package-data.xsl	19263																																	
	Total files size	117309																																	
Message Digest:	4891332bf7804c2a37251cba5a19c54fce310dea																																		

Digital Certificate Holder cn=Mani Adeli,ou=Registered
Name: Attorneys,ou=Patent and Trademark
Office,ou=Department of Commerce,o=U.S.
Government,c=US

FEE TRANSMITTAL

Electronic Version v10
Stylesheet Version v10

Title of Invention	Method and Apparatus for Using Connection Graphs with Potential Diagonal Edges to Model Interconnect Topologies During Placement		
Application Number:	09/737245	*09/737245*	
Date:	2000-12-13		
First Named Applicant:	Steven Teig, et al.		
Attorney Docket Number:	SPLX.P0012		
Art Unit:	2825		
Examiner:	Thuan V Do		
TOTAL FEE AUTHORIZED \$180			
Patent fees are subject to annual revisions on or about October 1st of each year.			
Fee Description		Fee Code	Amount \$
Submission Of Information Disclosure Stmt Fee		1806	180
AUTHORIZED BILLING INFORMATION			
The commissioner is hereby authorized to charge indicated fees and credit any overpayments to:			
Credit account number:	3007		
Expiration Date (YYYYMMDD):	2007-03-31		
Authorized name:	Mani Adeli		
Billing address:	94301		